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Goddard Space Flight Center

Wallops Flight Facility, Wallops Island, Virginia

Inside Wallops

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Ultra-Long Duration Balloon Status Report

NASA is examining flight data following the termination Sunday morning of an Ultra-Long Duration Balloon launched Saturday from the Northern Territory of Central Australia. The balloon reached its desired float altitude of 112,000 feet before a NASA Operations Team decided to bring it down.

met. We felt it prudent to safely recover the payload.”

On Feb. 25, the first full-scale test flight from Alice Springs ended just over four hours into the flight. The ULDB had reached an altitude of approximately 85,000 feet when it developed a leak.



The first launch of NASA's ULDB.

Photo by Mike Smith, Raven.

The Ultra-Long Duration Balloon (ULDB) was successfully launched from Alice Springs, Australia, at 9 a.m., March 10 (local time) (6:26 p.m. EST, March 9). The flight ended 24 hours 42 minutes later when the balloon and payload landed within one mile of the West Coast of Australia. Recovery operations are underway.

“Although, the ULDB launch and ascent were very close to normal, the balloon’s pressure was less, but within acceptable margins, than we expected on Saturday afternoon and evening,” said Steve Smith, Chief of the Balloon Program Office at the NASA Wallops Flight Facility. “At sunrise on Sunday morning the balloon failed to regain its daytime pressure and a decision was made to bring it down on the coast of Australia.”

“While it would have been nice to fly around the world, valuable data was obtained on the flight environment of the balloon, including the day-to-night cycle,” said Smith. “A NASA team will review this data and examine the recovered balloon prior to our next scheduled flight from Antarctica in December of this year. Although the flight was shorter than desired, all pre-flight minimum success criteria were

The flight was terminated and the balloon’s science payload was recovered in excellent condition. The launch window closed for the science mission, so the sequel flight did not carry a science experiment.

“A review team examined the recovered balloon and data from the flight and identified a possible weakness in the experimental balloon material that may have contributed to the first flight failure,” said Smith.

“We determined that it was best to proceed with the second test flight using a duplicate balloon,” Smith added. “This flight allowed us to further study the material in the flight environment and obtain extended flight performance data.”

The ULDB is designed to float above 99 percent of the Earth’s atmosphere and can carry a 4,500 pound payload. It is the largest-single cell, fully sealed balloon ever flown and is designed to support missions for up to 100 days. Balloons provide cost-effective platforms for near-space observations.

Further information on the ULDB can be found at: <http://www.wff.nasa.gov/~uldb/index.html>

Wallops shorts.....

On the road

Mike Savoy, Teacher on Loan, visited Prince Street Elementary School, and Keith Koehler, Public Affairs, visited Fruitland Intermediate School as part of National School Breakfast Week.

Catherine Donnelly and Tom Wilson, Facilities Management Branch, along with Jan Jackson and Randy Carrier, Litton/PRC, Inc. participated in a Career Fair on March 7 at Arcadia High School for students from Tangier, Nandua, Chincoteague and Arcadia High Schools.

75th Anniversary of the Liquid-Fuel Rocket Launch by Robert H. Goddard

Robert Hutchins Goddard had an “impossible” vision of spaceflight and dreamed of going to the moon. As a young boy, living on a farm in Worcester, Ma., he daydreamed of his vision as he began to trim the branches of a cherry tree.

Goddard spent many years studying physics and being an instructor at Clark University and Princeton University. In 1914 he was awarded his first two patents for rocket apparatus and over several years received more. Goddard then developed the basis for what is known as the bazooka.



Goddard's First Rocket, 1926

That vision of spaceflight became reality on March 16, 1926 when Goddard tested his first liquid fuel rocket. The rocket rose to a height of 41 feet, and averaging about 60 mph. He later developed a gyroscope for stabilization of the rocket and three years later on March 26, 1937, he launched another rocket, which reached the height of over a mile.

For more information on Goddard go to: <http://www.gsfc.nasa.gov/75th/75th.htm>

WOW March Profile



The Women of Wallops (WOW) have profiled Sue Semancik, Real-Time Software Engineering Branch, for the month of March.

Shemancik has been involved with the Wallops' Federal Women's Program since the 1980's.

She is responsible for putting NASA Wallops on the Internet before many of the other NASA Centers were on-line.

See more on Semancik and other Wallops profiles at: <http://www.wff.nasa.gov/~FWP/profiles/susansemancik.html>

Women's History Month **"STOP in the Name of Love":** **Calling a Halt to Abuse**

Spkr: Kathryn Adkins Reading
March 15
11:30 a.m. - 1 p.m.
Building F-3

Verbal and physical violence against women is at least as old as recorded history. Although we tell ourselves that it will never happen to us, most women will experience either physical or psychological abuse at some point in their lives.

Kathryn Adkins Reading will describe the history of violence against women, provide some statistical and anecdotal information about what is happening close to home, describe the differences between loving relationships and controlling relationships, and offer suggestions on how to help oneself, a family member, or friend come to terms with abuse or controlling relationships.

Additional information about the speaker and luncheon is available at the Women of Wallops website: www.wff.nasa.gov/~FWP/

Luncheon tickets are \$5 and are on sale at the Exchange. For information, contact Pat Pruitt, x1245.

For Sale **Just in time for Easter**

Adorable Pug Puppies
All Males

\$375.00 - Fawn
\$425.00 - Black
Price includes - first shots, worming and veterinarian check up.

They will be ready to go by April 9!
Call Sandy Bowden, x1060.

Pre-S.A.T. Testing

The Wallops Exchange and Morale Association (WEMA) would like to invite the children of Wallops civil service, contractor, and partnering tenant employees to participate in Pre-S.A.T. Testing. The Wallops Black History Club will host the testing on Saturday, March 17 from 9:30 a.m. to 1 p.m. in Building F-3.

For further information contact David Smith, x1316 or Roland Wescott, x1624.

Cryogenic Safety Training

March 26 - 28, 2001
8 a.m. - 4 p.m.
Wallops Flight Facility

The course is designed to provide an in-depth understanding of NASA, OSHA and NFPA requirements for the safe handling and usage of cryogenic fluids. It is designed for employees who design, implement and operate flight and ground based cryogenic systems as well as those who supervise or have safety oversight and/or inspection responsibilities for operations involving cryogenic fluids.

For more information or to register contact Curtis Oakley, x2290.

NASA Scholarship Fund Applications

Applications are available for college scholarships for qualified dependents of NASA and former NASA employees. The scholarships are provided and awarded by the NASA College Scholarship Fund, Inc., which was established as the result of a substantial unsolicited gift by the noted Pulitzer Prize winning author James Michener.

Seven scholarships will be awarded in the amount of \$2,000 each, renewable for a maximum of \$8,000 over six calendar years.

For additional information and a copy of the application, please use the following URL:
http://jspeople.jsc.nasa.gov/jsc-hro-2/special_programs/scholarship.htm

Applications and additional information may also be obtained in the Wallops PAO Office, Bldg. F-6. **All applications are due by March 30.**

Space Shuttle Discovery Carries Former GSFC Employee as well as GAS and SEM Projects

Space Shuttle Discovery blasted off from the Kennedy Space Center at 6:42 a.m. EST Thursday morning on a mission to deliver a new resident crew to the International Space Station.

Oboard STS-102 is a Wallops managed Getaway Special (GAS) and Student Experiment Module (SEM). G-783, also known as Aria-2, from Washington University in St. Louis, is carrying 124 passive experiments from students in the St. Louis area. For more information on Aria-2, click on: <http://www.aria.cec.wustl.edu/Aria2/default.htm>

The SEM Program is an educational initiative that makes use of the GAS canister. This mission marks the ninth flight for a SEM. For a description of the experiments on SEM-09, go to: <http://www.wff.nasa.gov/%7esspp/sem/new/sem09.html>

The seven member STS-102 crew includes former GSFC employee Paul W. Richards who is serving as a mission specialist and flight engineer for the flight.

While at GSFC, Richards worked in the Verification Office, Electromechanical Branch, Robotics Branch and Guidance and Controls Branch, all within the Engineering Directorate. He was also a senior EVA Tool Development Engineer for the Hubble Space Telescope. He will join STS-102 crewmember Andy Thomas on the second of two planned spacewalks while Discovery is docked to the space station.

You can follow the progress of mission STS-102 by going to the spaceflight web site at: <http://spaceflight.nasa.gov>



Happy St. Patrick's Day

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